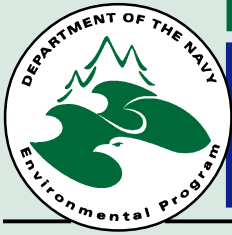


Winter 2003



ENVIRONMENTAL NEWS

Engineering Field Activity Northeast,
Atlantic Division, Naval Facilities Engineering Command



Jamaica Cove Wetlands Project Successful

Phase I Remedial Action of Jamaica Island Landfill Completed Ahead of Schedule

By Ms. Marty Raymond

IRP Coordinator, Portsmouth Naval Shipyard



Portsmouth Naval Shipyard -- A short distance away from drydocks and piers where nuclear-powered submarine overhaul work is progressing with record efficiency, the Navy's Installation Restoration Program took a huge step forward recently at the Portsmouth Naval Shipyard. Phase I of the Jamaica Island Landfill remediation project was completed with the creation of tidal wetlands along the shore of the Piscataqua River. The Jamaica Island Landfill was created from the 1940's to the 1970's when 25 acres of former tidal mudflats between Jamaica Island and Seavey Island at the Kittery, Maine shipyard was filled in by the Navy. The fill consisted of various

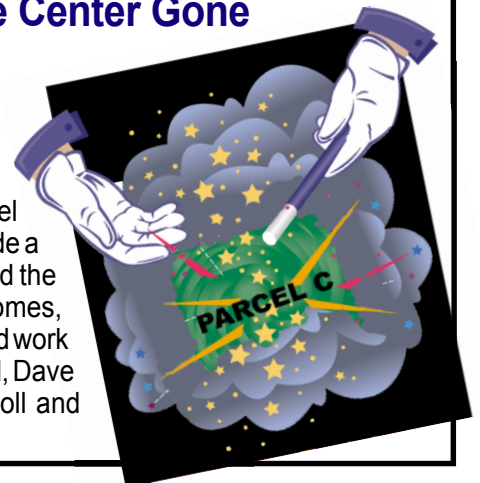
(Continued on page 12)

POOF! Last BRAC Parcel at Navy Undersea Warfare Center Gone

By Michele DiGeambeardino

Environmental Engineer

On November 27, 2002, EFA NE's Real Estate Division completed the conveyance of Parcel C (11 acres) at NUWC to the New London Development Corporation (NLDC) under an economic development conveyance. This was the last BRAC parcel in New London, CT to be conveyed. The waterfront portion of this property will include a public access riverwalk. During the lease and cleanup of this property, NLDC raised the elevation to a level where flood insurance will not be necessary for the future townhomes, apartments and office space owners. This could not have taken place if not for the hard work and determination of (our former BRAC environmental coordinator, Mr. Bill Mansfield, Dave Drozd, Deb Felton, Ralph Lombardo, Gregg Preston, Cheryl Grosso, Tim Driscoll and [Editor's note: the lovely, talented and modest] Michele DiGeambeardino).





From the Department Head's Desk

By Conrad Mayer, P.E.
Head, Environmental Department

Well, it looks like more change is on the horizon.....

The Navy is going through a major review of all organizations and functions involved in operating and maintaining Naval Installations. The objective is to achieve savings that can be reallocated for direct support of our operating forces. Significant reorganization and realignment is anticipated.

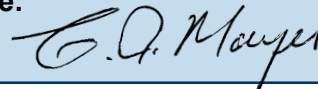
What's the best way to influence the outcome of reorganization and realignment so it has a positive effect on your own environmental organization (no matter where you're sitting)? The answer is easy – continue to contribute value to the Navy and please your clients.

While we have to wait to see how things sort out, some things are evident. FY02 was a banner year for accomplishments; not just for environmental, but for all facility-related programs. There was more than the normal end-of-year communication lauding the workforce for its many accomplishments. And this work is not going away!

The thought of change is always unsettling. But we are used to change and, in an effort to achieve savings in our facility programs, have already successfully weathered re-engineering and regionalization. I feel we've established an efficient and effective partnership among the players (Region/EFA/Activities) here

in the Northeast. Rather than worry about what might be coming, we should continue to work on improving what's happening now.

There will probably be changes, but I think the major ones will occur at high levels. For others, there may simply be a name change.




**ENVIRONMENTAL
NEWS**

Engineering Field Activity Northeast,
Atlantic Division, Naval Facilities Engineering Command



EFA Northeast Environmental News
is a quarterly publication of the
Environmental Department
EFA Northeast

Naval Facilities Engineering Command
10 Industrial Hwy, Mail Stop 82
Lester PA 19113-2090

www location: <http://www.efane.navfac.navy.mil>

DSN 443-0567; COMM (610) 595-0567 FAX -0555

The Environmental Newsletter has been placed on the
DENIX system under Navy/News.

The EFA Northeast Environmental Department does not endorse companies or products mentioned. Our primary target audience consists of Navy people at activities in our area of responsibility (the northeastern states) who are involved in environmental programs. The views and opinions expressed in this publication are not necessarily those of the Department of the Navy. We invite your contributions, comments and questions. To hold down costs, *Environmental News* is printed in black and white. Visit our website if you prefer to view or print a full-color version.

CAPT Robert B. Raines, CEC,USN
Commanding Officer

Conrad Mayer
Head, Environmental Department

Harvey Shultz
Executive Editor

Greg Procopio
Editor
Layout/Graphics



Printed on
Recycled and
Recyclable Paper

EFA NE Awards FFP/IDQ Contract for Preliminary Assessments at Navy MMRP Sites

By Bob Lewandowski

*Head, Delaware Valley
Restoration Management Branch*

LANTDIV has been tasked by NAVFACHQ to prepare preliminary assessments (PA) for Navy Military Munitions Response Program (MMRP) sites throughout the United States. EFANE has been chosen to manage and execute this program. The MMRP consist of Navy ranges and sites, other than operational ranges and sites, that contain munitions and explosives of concern (MEC) and/or munitions constituents (MC). Included are unexploded ordnance (UXO) and discarded military munitions (DMM) sites, as well as sites where MC may exist from past operations or processes, such as maintenance or disposal of munitions and/or munitions materials.

Malcolm Pirnie, Inc. was selected via a slate/select procedure from eighteen firms that responded to EFANE's solicitation. They bring extensive

experience from similar work that they completed for the Army, as well as a history of providing policy-level and programmatic support to the Department of Defense. The five-year, \$12 million contract was awarded in September 2002. Seven contract task orders have been executed to date which include a programmatic workplan as well as preliminary assessments for 28 sites at six Navy activities.

The programmatic workplan provides the methods and procedures that will be used to conduct the PA. Prior to beginning a PA at a particular activity, a site-specific workplan addendum will be prepared for that installation.

We conducted our first field visit in early January 2003 at the Former Munitions Bunker site at NAS Brunswick, ME. This PA will serve as our "pilot" to test the programmatic workplan and ensure that the ensuing PAs meet the expectations of headquarters and our client activities.

Last Bugle Call for COL Shultz

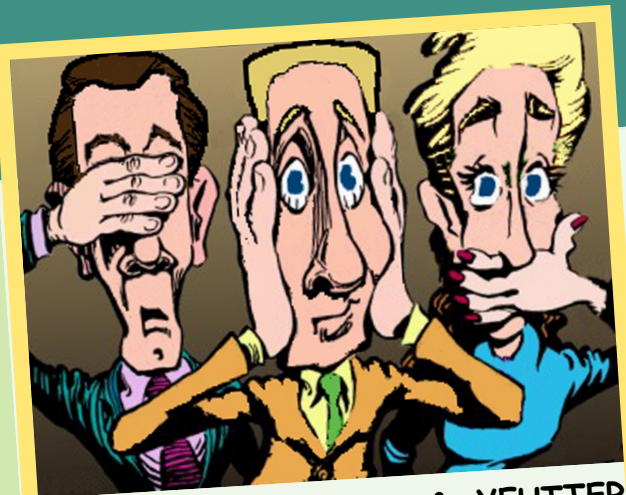
Harvey Shultz, EFANE's Environmental Services Division Director who also serves as NAVFACHQ's Applied Biology Program Manager, retired last August from the US Army reserves after a 35-year career.

Harvey served on active duty for over 3 years in the 1960's including a tour in Vietnam in 1968 for which he was awarded the Bronze Star. He also conducted research at the Army Environmental Hygiene Center and instructed in preventive medicine at the Army Academy of Health Sciences. Later as a reservist, he served in a number of Individual Mobilization Augmentee positions, most notably as counterpart to the Executive Director of the Armed Forces Pest Management Board (AFPMB) in Washington, DC, a position that reports to the Assistant Deputy Under Secretary of Defense (Environment). In that capacity he worked on numerous policy documents. He was a primary author of the DoD instruction on pest management, and also wrote numerous technical guides and disease vector ecology profiles. He was published in peer-reviewed scientific journals and wrote a chapter on pest management in the DoD for an entomology book.

At a ceremony at the AFPMB in November, he was awarded the Legion of Merit. The citation noted his success at leveraging his Army and DoD pest management reserve work with his NAVFAC responsibilities for the betterment of all. Noting that receipt of the award was a humbling experience and that few professional products in pest management are one-person efforts, but rather reflect the work of many, Harvey dedicated the award to his many professional colleagues. He continues to represent NAVFAC's interests as a civilian member of the AFPMB Council and Executive Committee.



COL Harvey Shultz, USAR (Ret.) proudly holding a shadow box that displays his medals and other mementos of a 35-year Army career.

**BARCLIFT, SPEICHER & YEUTTER**

RISKY BUSINESS

Spotted Turtles Spotted Less In Massachusetts

**Risk Assessment
Self Directed Work Team**

Dave Barclift - Jason Speicher - Lisa Yeutter

During the course of the CERCLA Phase II Remedial Investigation field program at the former Naval Air Station NAS South Weymouth (NAS SOWEY), field personnel at the installation observed a spotted turtle (*Clemmys guttata*). Realizing that spotted turtles are state-listed Species of Special Concern in Massachusetts and are afforded protection under the Massachusetts Wetlands Protection Act and the Massachusetts Endangered Species Act, EFA NE tasked ENSR, International to conduct a focused field effort to gather information about the extent of the turtle population distribution, and habitat utilization. While implementing the spotted turtle field effort, another turtle Species of Special Concern was discovered, the eastern box turtle (*Terrapene carolina*). In response to this discovery, the field program was extended to include both box turtles and spotted turtles. Thus, the NAS SOWEY Turtle Investigation Program began.

The Turtle Investigation Program has been in “full-swing” since 1999 and now has expanded from just the IR sites to cover most of the facility. The program is a mark-recapture survey, meaning that individual turtles when captured are given a unique identification number. This enables us to “track” turtle movements and to further understand the life history characteristics of the turtles. Methods used for the investigation include meander surveys (walking the habitat), trapping surveys (for spotted turtles only) and use of radio telemetry (tracking the turtles using radio transmitters). Data collected upon capture

(Continued on next page)



RISKY BUSINESS

(Continued from last page)

includes life history type measurements such as habitat type, weight, length, age, sex, and behavior. Baseline data compiled over the three-year investigation to-date provides EFA NE with critical information needed to sequence environmental investigations or remedial activities in a manner that minimizes impacts to rare turtles at NAS SOWEY.

Spotted turtles are becoming less common in Massachusetts due to over-collecting, predation, and more importantly through anthropogenic induced habitat destruction and road mortality (i.e. because of human activities). Future development of roads and buildings at NAS South Weymouth, as well as remediation of hazardous waste sites, if not carefully planned, could severely impede annual movements of the sensitive species or destroy critical terrestrial habitats. Individual spotted turtles have been documented from within different age classes (i.e., hatchlings, juvenile, adult), which would indicate that this population is currently secure.

Similar to spotted turtles, eastern box turtle populations are greatly impacted by habitat destruction and road mortality, particularly in the rapidly developing northeastern United States. Unlike the spotted turtle population at NAS South Weymouth, we have not yet observed eastern box turtles from either hatchling or sub-adult age classes. If these observations represent actual environmental conditions the lack of juvenile or hatchling turtles suggests that there is

little or no recruitment into the population. Future loss of terrestrial habitats could destroy critical nesting and foraging habitats for the eastern box turtle, which could potentially contribute to population decline or even localized extinction.

The turtle program has put an interesting spin on dealing with and avoiding Natural Resource Injuries to rare turtle species in and around CERCLA sites at NAS SOWEY. Recently, the Navy was remediating soils containing PCBs in the middle of an area providing critical habitat to state-listed rare species. Through a coordinated effort, four individual state-listed box turtles were found to be present within the proximity (10 to 20 meters) of the area where backhoes were actively working. Each of these turtles was previously radio-tagged in anticipation of this remedial response action. The use of radiotelemetry surveying, as part of the Turtle Investigation Program, allowed us to successfully complete the remediation without harming or injuring the box turtles, resulting in a better environment for all.

Information from the Turtle Investigation Program will also serve to guide the design of any future study that may be carried out at the base with regards to spotted and eastern box turtles ecological requirements, habitat utilization, and distribution at NAS South Weymouth.

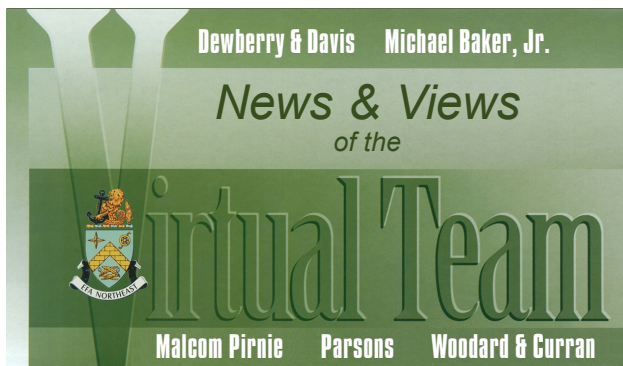
For more information on the Turtle Investigation Program, or general biological or risk assessment information, please contact: the still hard-working Dave Barclift, Jason Speicher or the lovely and talented Lisa Yeutter.

George Shirley Wins Dolores O'Malley Award



In a January 15 ceremony Admiral Michael Loose presented the Dolores O'Malley Award to contract specialist George Shirley (center). Dolores O'Malley, former Acquisition Department Head and Bob Smith, current Acquisition Department Head are pictured with George.

The award is presented annually to a contracts professional for acquisition excellence. George is involved in many critical environmental awards and has always mentored younger contract specialists. Congratulations George!



The V-Team is an innovative partnership of five environmental consultants under contract with EFA Northeast - Dewberry & Davis; Michael Baker, Jr.; Malcom Pirnie; Parsons, Woodard and Curran - who provide full service environmental support to Navy activities. The V-Team combines existing resources to enhance each firm's capability for producing quality results on time.

Article by Henri Vincent, P.E.
Woodard & Curran

The V-Team is working together to develop programs that bring value to their clients. One area which illustrates this team approach is in the development of information management systems. By developing consistent standards and utilizing preferred software platforms, the V-Team can deliver an end product that meets the goals of the end user today yet is flexible and expandable to support a full range of Environmental Health and Safety (EH&S) programs.

One recent example of this is Environmental Program Manager Jeff Henning's approach to tracking and managing Stormwater Compliance at NSA Mechanicsburg, PA.

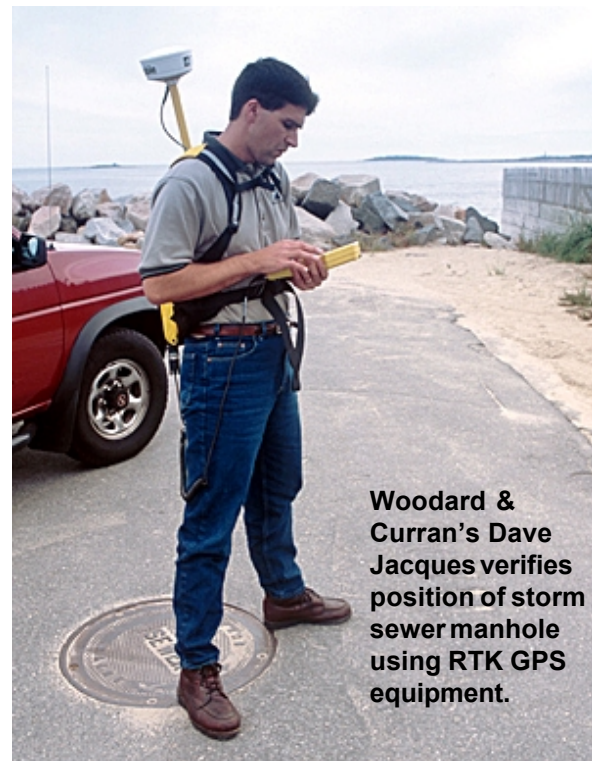
In the past, materials used at NSA often made their way into the stormwater system, thereby contaminating the stormwater. With approximately 800 acres of area captured by the storm system, the task of tracking down sources of contamination and cleaning the storm sewers is challenging, to say the least.

To more effectively manage these tasks, Woodard & Curran is developing a Geographic Information System (GIS), which will include an updated stormwater map along with base map features such as roads and buildings. Also, both historical and current transformer locations, which are key to this project for determining PCB contamination, are being identified. From

there, approximately 900 locations and elevations for components of the stormwater system are being field verified with RTK GPS technology (as shown in the photo). A field crew then inspects the stormwater features to determine pipe inverts and system connectivity. Sections of the storm sewer system that have been cleaned will be entered into the GIS to further manage the cleaning effort.

In addition to developing the GIS, an Access Database is being developed to store all existing analytical data associated with the storm sewer system. Once the GIS and database are developed, NSA Mechanicsburg will then be able to use the visual component of GIS combined with the tabular stormwater sampling data to look for trends and possible contaminant sources.

The Environmental Department will initially use this tool for stormwater compliance, but it can have many future uses. It is being developed using ESRI ArcView GIS and Microsoft Access software. As such, the system is scalable and could be utilized by other V-Team members in areas such as EH&S compliance, remediation, public works and engineering.



Woodard & Curran's Dave Jacques verifies position of storm sewer manhole using RTK GPS equipment.

After The Dance Is Over...It May Not Be

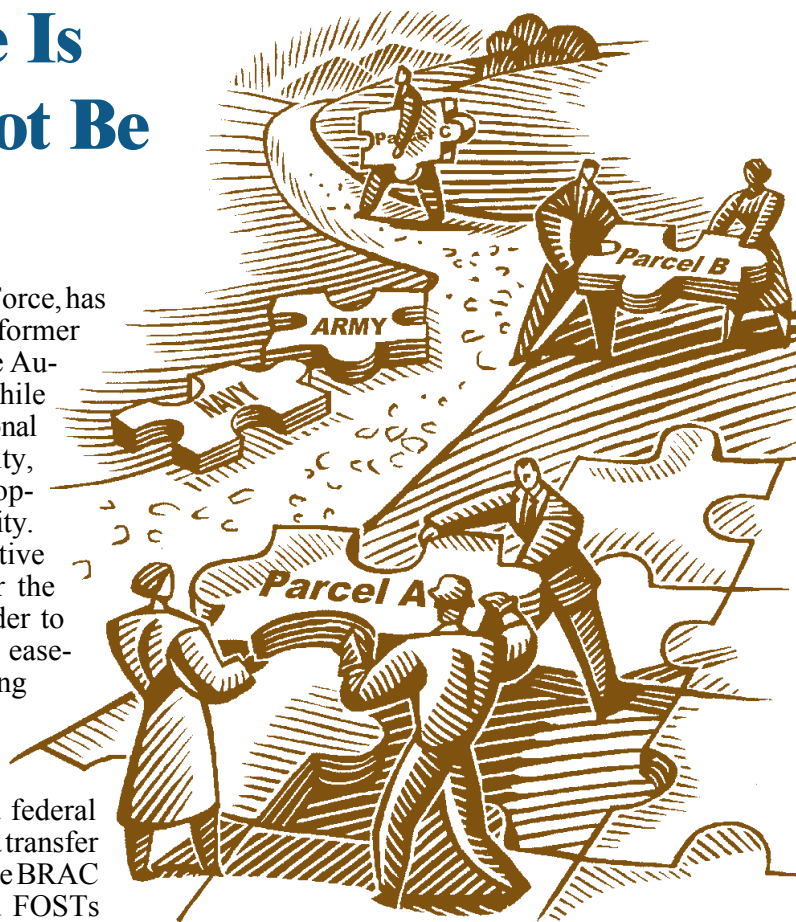
By **Lonnie Monaco**

Environmental Project Manager

The Navy, along with the Army and Air Force, has been selling off or giving away land of former military facilities to Federal Lands Reuse Authorities (FLRA) across the country. While some of the parcels are retained for recreational use, others are sold to the local municipality, water authority or developers, and the property is gradually absorbed into the community. If there are land use restrictions or an active remediation left in place, the deeds for the affected parcels will record these in order to protect remediation projects, along with easements to ensure treatment and monitoring systems remain accessible to the Navy and its contractors.

You may be preparing to transfer a federal facility soon, or you may have completed a transfer recently, so you think that the hard part of the BRAC process; namely, getting the RODs and FOSTs signed, is over. You may even go so far as to ask for an additional assignment, since this transferred facility will only require minimal effort on your part to implement the monitoring of the remediation, and conduct a five-year review when the time comes. Before doing so, review the proposed re-use plan for all parcels, and see what, if anything, the new landowners are proposing that might impact your remedies or your ability to reach them. You have little control over whether or not the appropriate people read and understand the land use restrictions contained in the deed. It really does you no good to know that you can always take a new landowner to court if he infringes, destroys, or disrupts a remedy or monitoring system. You may win the lawsuit, but the time, effort, and expense in doing so could be significant and who knows how the regulators will perceive your actions and your responsibility in operating the remedy according to the ROD.

The best solution is to maintain continued vigilance of your former facility in order to prevent trouble before it occurs, or, at the very least, when it can still be easily fixed. This will become more difficult as the military/civilian presence and your onsite technical meetings dwindle to zero. Make it a point, however, to



get to the site as often as you can to keep watch on how proposed construction could affect your system(s). However, when personal vigilance is not possible or feasible, that's where your O & M contractor(s) can really help.

Part of your long-term operations probably includes one or more contractors whom you've tasked to run the treatment plant, maintain landfill caps, take monitoring well samples, mow the grass, plow the snow, etc. If they are not volunteering any information on the development in the area, make it a point to ask them directly. If your contractor makes a statement like, "You wouldn't recognize the place", you may be in for some trouble. Once a new landowner takes over, his primary focus is to begin to generate income. Whether he does this by refurbishing present structures or building new ones, chances are he's going to reshape the landscape. The bigger the rehab, the greater the chances that his effort will have an impact on your remedies. You don't want to stop him, but by finding out about his intentions and becoming involved early in the process, you can avoid serious problems

(Continued on page 11)

Case Study: DDT-Contaminated Soil and Sediment Removal From Active Wetland Areas

By **Lawrence E. Kahrs, PE & Thomas A. Fowler**

Foster Wheeler Environmental Corporation

Introduction and Site Background

Between the summers of 1999 and 2000, EFANE and Foster Wheeler Environmental Corporation (Foster Wheeler) conducted a remedial action at the Naval Submarine Base New London (SUBASE) located in Groton, Connecticut. The project consisted of the remediation of a pesticide-and metals-contaminated wetland. Three areas of focus are presented in this article; project planning with stakeholders, water management during remediation, and the subsequent wetland restoration.



SUBASE historically used pesticides for control of mosquitoes that breed in the Area A Downstream/Over the Bank Disposal Area (hereinafter referred to as “the site”). Primary contaminants at the site were DDT and its degradation products (DDTR) and secondary contaminants were metals, likely related to river dredge spoils that were disposed in the area. A Record of Decision (ROD), signed in 1997, identified the final remedy for soil and sediment at site to include removal, treatment and discharge of surface water at the site, followed by excavation, dewatering and off-site disposal of contaminated soil and sediment. The prescribed remedy also included the restoration of the freshwater wetlands at the site. Foster Wheeler, as EFANE’s Prime Remedial Action Contractor, prepared a Work Plan and executed all fieldwork in remediation of the site.

Planning With Stakeholders

The planning tasks included final delineation of the contaminated soil and sediment at the site in the fall of 1998, composition of a Work Plan for contaminated soil and sediment removal, and composition of a Wetland Restoration Plan. Involved in the planning process were ten different entities of the Navy, SUBASE, and the Regulatory Community. Because of the long list of stakeholders and varying interests and needs for each, Foster Wheeler worked closely with these parties during the planning process. A multi-phased Work Plan submittal process was implemented to provide opportunity for stakeholders to evaluate the plan’s adherence to their needs. The Work Plan was prepared and issued in design packages consisting of 30%, 60%, 90% and 100% complete. This phased approach to the Work Plan allowed work to commence on site mobilization and excavation while the final details on wetland restoration were still being negotiated. Other successful techniques for including stakeholders were holding roundtable discussions at each stage of planning, and sending weekly updates to the project team throughout construction.

Water Management

Effective water management played a crucial role in the success of this project. The site drains a watershed consisting of approximately one-third of SUBASE. The watercourses within the site include three small ponds (Upper Pond, Lower Pond, and OBDA Pond) and six streams (Streams 1 through 6). The primary water management tool on this site was planning and sequencing of remedial activities. The following is a list of successful water control methods employed on this project:

- Excavation and restoration sequencing – Perhaps the most important and most effective tool was to use the site topography present to help determine the sequence of excavation. That is, one watercourse was remediated while surface water was being diverted around it through an adjacent watercourse. The site was also remediated in a “top to bottom” fashion to eliminate the possibility of re-contaminating an already remediated watercourse;
- Stormwater and erosion control measures – Surface water originating from sheet flow from outside the site was channeled around the watercourses with an impermeable fence known as Tough Guy® Barrier. Multiple erosion control measures were employed to minimize damage due to concentrated stream flows;
- “Yankee Pipeline” – Surface water from upstream watercourses was diverted around the site with corrugated HDPE piping; and
- Capture and pump surface and groundwater – sumps were installed in each watercourse to assist in pumping down the existing surface water. This surface water was then run through a treatment system prior to discharge downstream.

(Continued on next page)

Wetland Restoration

Following removal of all contaminated soil and sediment, a total of 2.90 acres of palustrine wetlands required restoration for conformance to the Clean Water Act. The long-term goal of the restoration is to develop a wetland that will become successfully established within the restored hydrologic regimes. The objectives of the Wetland Restoration Plan were fourfold:

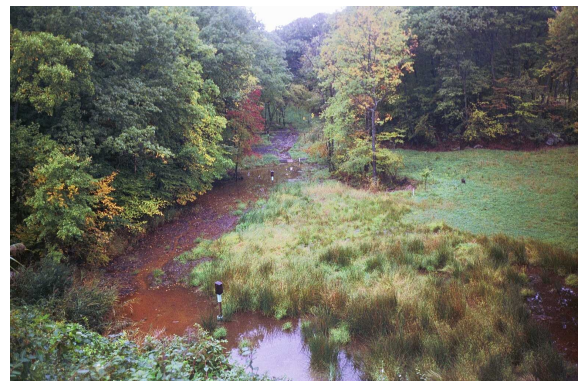
- Restore 2.90 acres of palustrine wetlands (1.26 acres emergent, 1.17 acres scrub/shrub/forested, and 0.47 acres open water) disturbed during removal of contaminated soils and sediments;
- Establish a self sustaining, functional palustrine wetland system composed of emergent, scrub/shrub, forested and open water cover classes;
- Establish a plant community that has a competitive advantage over *Phragmites australis*; and
- Restore and enhance pre-remediation wetland functions.

To accurately restore the existing conditions at the site, Foster Wheeler took a few important steps prior to remedial action:

- Surveyed all trees within the areas to be cleared to identify species and size;
- Developed a site conceptual hydrologic model. This conceptual model, based on groundwater and surface water data collected revealed that Upper Pond was a perched water body created by the underlying sediment and soil;
- Performed a complete topographic survey of the site using a one-foot contour interval; and
- Collected soil and sediment samples from each of the wetland areas for soil classification to allow replacement soil to be matched to the existing conditions.

The overall restoration of the site involved the placement of clean soil into excavated areas to mirror the pre-existing grade of the site. Topsoil was then placed in thickness of 6 inches to 1 foot to bring the final grade to specified elevation. The wetland and upland seed mixes were broadcast at the completion of final grade. Planting of trees, shrubs and aquatic plants took place in the spring of 2001.

During and After Restoration



The picture at left shows placement of a clay liner and topsoil in the Upper Pond. This clay liner replicated the perched conditions that were present in the Upper Pond prior to remedial action. The second picture shows the OBDA Pond after restoration, with clearly established herbaceous (i.e. grassy) growth visible.

Summary

A project of this scale provides many challenges. The three topics discussed in this article, planning involving the project stakeholders, water management, and wetland restoration, were the key issues at this site. We found that inclusion of all stakeholders from project inception, including holding meetings during planning and at the site during construction, and keeping them updated weekly on progress contributed greatly to buy-in. Identifying the hydrologic regime and exerting control over all sources of water at the site proved invaluable. Also, restoring the wetland to near-existing conditions using the existing hydrologic regime has, to date, met with great success. Once these issues were evaluated and resolved, the remaining challenges on the project proved manageable and were similar to any large construction effort. A successful outcome was ensured for this project by identifying these issues early in project and developing a strategy for resolution.

[Editor's note: This article was previously presented at the National Defense Industrial Association (NDIA) 27th Environmental Symposium in Austin, TX on April 26, 2001 and subsequently published in proceedings.]

Personals



Congratulations to **Dave Barclift** on being selected to the GS-13 Risk Assessment Task Leader position.

"Dave has been an outstanding contributor to the IR program and is a real asset to the command. We look forward to his continuing leadership and support" says Deb Felton, Dave's supervisor.



Environmental Engineer **Jim Mills** received the honor of being named EFA NE's Engineer of the Year. Jim was recognized for his leadership in executing the environmental assessment, cleanup and compliance requirements in support

of the closure and property transfer of Naval Security Group Activity Winter Harbor, ME. On July 1, 2002 Winter Harbor's largest site, Schoodic Point, was successfully transferred to the National Park Service.

Congratulations to **Joe Rhyner** and **Thom Snyder**, EFANE's recent graduates of the Naval Facilities Engineering Command Leadership Development Program.

Joe, an Environmental Engineer, and Thom Snyder, an Industrial Hygienist, provide environmental compliance support to our clients.

Farewell to Remedial Technical Manager (RTM) **Mike Fohner** who worked for Deb Felton in the Remedial Technical Branch. Mike accepted a facilities engineer position at NAVSSES. We wish for him much success and happiness.

Bravo Zulu to EFA NE Environmental Department's **Naomi Dash**, **Alison DeBree** and **Amanda Kittelson** who were among a group of several EFANE Interns and PDCs who successfully completed the Engineer in Training (EIT) exam in January. The group prepared for the exam in an EIT Preparation Class held evenings at EFA NE.

Welcome aboard **Courtenay Hoernemann** (pronounced Her'-ne-man) who joined the PDC program and is training in Lester, PA to assist Harvey Shultz with the NAVFAC HQ Applied Biology program. She will have a long EFA NE rotation with Steve Kincaid that includes the same sorts of experiences that our EFD/EFA applied biologists have.



Courtenay earned a B.S. in entomology and applied ecology from the Univ. of Delaware and an M.S. in entomology from S. Dakota State U. before working the last 4 yrs for the USDA - ARS - Grain Marketing and Production Center in Kansas. She has returned to her roots in New Castle, DE with husband Todd and baby daughter Halina.



Shannon Sked is Steve Kincaid's latest EFANE Entomologist, having reported in January with a freshly completed M.S. Degree from Penn State. He received his B.S. at Cook College, Rutgers University, in Natural Resource Management after earning an A.S. in Plant Science and Biology at Mercer County Community College.

He is looking forward to switching focus onto urban pest management with the EFANE team. Shannon and his fiancée, Megan MacNeil, reside in Philadelphia.

(Continued on next page)

Personals Continued

Rear Admiral Michael K. Loose presented an Atlantic Division Command Coin of Excellence to Environmental Contracts Technical Branch Head **Roger Boucher** during his visit to EFANE on January 16th. The award was in recognition of Roger's efforts closing out EFANE's first CLEAN contract. Roger served with then CDR Loose in NORTHDIV's Acquisition Department in the late 1980's.

Also receiving a coin was contract specialist **Michelle Donnelly**. Michelle was cited for her outstanding support to small business initiatives through her development and management of the Command's new EMAC and O&M contracts. These contracts are recent Small Business Awards.

Dave Barclift received a coin in appreciation of his efforts as the EFANE 2002 Combined Federal Campaign chairperson. \$31,200 was raised which was 12% more than the goal.

Entomologists **Christine Eisner** and **Courtenay Hoernemann** were recognized in January with a Special Act Group Award from LANTDIV's Facilities Support Services Acquisition Branch. They coordinated a collaborative fast track team effort that resulted in technical specifications for the new BOS Template in conjunction with the FSC Product Line Plan. Although Steve Kincaid's Biological Sciences Branch is an integral component of the EFANE Environmental Department that manages compliance in the pesticide media, they also provide facilities support services to installation clients for pest control contracting.

After The Dance Is Over

(Continued from page 7)

as well as show the developer that you're willing to work with him. However, this doesn't mean that the Navy will pay to modify our system to accommodate his development. On the contrary, assuming that the Navy properly retained its rights to access and maintain remedies in the transfer deed covenants, it is the developer's responsibility to pay for all costs associated with disturbing or altering our remedy. The bottom line is that we must remain whole, that the changes brought about by the landowner's work will

have no net effect on our ability to operate our remedies according to the ROD.

However, there may be times when it's prudent for us to assume some of the costs. If the developer is expanding a parking area and in doing so increases the risk of a vehicle running into one of our monitoring wells, it may be in our best interest to flush-mount the well at our expense, or share the cost with the developer. Taking a hard line approach may be within your rights, but it may not be the right thing to do. Choose your battles, consider everything, then decide. Another way to ensure that the developer will be made aware and kept aware of your remedy is by preparing and issuing a Land Use Control Implementation Plan (LUCIP). The LUCIP provides a formalized method of checking on land use controls and providing recurring notification to the new landowner(s). This is especially valuable if the property changes hands several times over the years, and the clarity of the restrictions begin to fade to the point of being forgotten or ignored.

So far, discussions have been limited to property that the Navy owned in the past, but what about property that the Navy has never owned? If we can expect to have problems maintaining remedies on property that we used to own, can we reasonably expect to maintain a remedy on property that's always belonged to someone else? This second area can cause you even more grief. Consider this - As part of your RI you install wells on neighboring properties. Your investigation shows that you have offsite migration, so now some of those wells serve as sentry wells for an onsite treatment system or are part of a monitored natural attenuation (MNA) system.

At the time the wells were installed, you obtained access agreements for the short-term (before you knew if you would need them, or for how long), then obtained easements for those that you determined you would need long term. If you've located them in a remote spot of your neighbor's property, and you've made them as unobtrusive as possible (perhaps flush-mounting them, or surrounding them by vegetation), chances are your neighbor may forget they are there, until your contractor shows up to sample them. But this can change if the property is to be sold. The present landowner may ask you to move the wells, as they may be perceived as a liability, or the future owner may have plans to develop the property in a way that makes the wells an obstruction or hindrance. Of course it is your right to maintain those wells, but is that the right thing to do? Each situation must be evaluated separately. Being aware of issues before they arise, or before they become problems, and staying flexible and pragmatic (not to be confused with weak or indecisive) is how to resolve them.

Wetlands Project Successful

(Continued from front page)

industrial wastes including general refuse and construction rubble, and also included some materials known today to have hazardous constituents.

In August 2001, following a decade of scientific study and analysis, the Navy and Environmental Protection Agency, with concurrence from the Maine Department of Environmental Protection, signed a Record of Decision or ROD outlining the clean-up remedy for the site. The ROD called for the construction of a hazardous waste landfill cover. The parties agreed that covering the landfill would provide the best protection of human health and the environment, meet all State and Federal regulations, and be most acceptable to the stakeholders, including the public.

Specifically, the remedy was selected to minimize the infiltration of rainwater from passing through the materials contained in the landfill. In addition, the ROD placed land use restrictions on the landfill to prevent drinking the groundwater and prevent disturbance of the cover once it is in place and instituted an inspection and maintenance program to ensure the remedy is effective over the long term.

In the ROD, the Navy also agreed to re-evaluate the potential for consolidating portions of the landfill into the remainder of the landfill. The pre-design investigation conducted in August 2001 determined that consolidation of material from the Jamaica Cove portion of the landfill would provide additional benefits of removing landfill material from a tidally influenced area and provide additional area for construction of shoreline erosion controls. Removal of waste materials from this area and consolidation in the remaining landfill area also reduces the extent of the landfill cover.

The remedial action for the Jamaica Island Landfill will be conducted in two phases. In Phase I, the portion of the landfill adjacent to Jamaica Cove is being excavated and consolidated on the other portion of the landfill. Within the excavated area, a salt marsh wetland will be established. A protective rock berm is being constructed to minimize impacts from wave action in the cove and to support establishment of the salt marsh wetland environment. A channel through the berm will permit water to flow into the cove during high tide and drain fully during low tide. In the spring of 2003, the newly created wetland area will be planted with native salt marsh grasses. The low marsh zone will be planted with salt marsh cordgrass (*Spartina*

alterniflora). Along the upper edge of the shoreline, native trees and shrubs will be planted. Even though the wetlands will not be planted until the spring of 2003, Jamaica Cove is already attracting wildlife. Ducks and a harbor seal have been seen already.

On June 11, 2002, the Portsmouth Naval Shipyard hosted a Groundbreaking Ceremony for the Jamaica Cove Wetlands Project, the first phase of the remediation. The ceremony was held at the Jamaica Island Landfill. Present were representatives from the United States Environmental Protection Agency, Region I, Maine Department of Environmental Protection, United States Army Corps of Engineers, and Shipyard Restoration Advisory Board community members. The group joined Captain Kevin M. McCoy, Shipyard Commander, and other representatives from the Navy for the ceremony. During his remarks at the groundbreaking, Mr. Mark Hyland, Director, Division of Remediation, Maine Department of Environmental Protection said, "these wetlands will make a big difference." According to Mr. Hyland the wetlands will help improve the economy by providing more space for fisheries. "More wetlands means more fisheries", he said.

Foster Wheeler Environmental Corporation, the Navy's environmental construction contractor, began Phase I of the project on June 24, 2002 based on the design completed by the Army Corps of Engineers, Omaha and New England Districts. They completed it in early September, one month ahead of schedule.

Phase II of the project, the installation of the landfill cover, will start in the spring of 2003. During this phase, the wetlands area will be planted with appropriate vegetation, and the multi-layered hazardous waste landfill cover system will be constructed over the remainder of the landfill. The Phase II work is scheduled to be completed in 2005. After construction is complete, a portion of the landfill area will be reclaimed for recreational purposes and a paved section will be used for vehicle parking and pleasure boat storage.

The complete project is expected to cost approximately \$15M.

[Editor's Note: EFA NE was lead in the scientific study and analysis that led to a Record of Decision outlining the clean-up remedy for the site. EFA NE was a lead in re-evaluating construction contracts that included creation of tidal wetlands and construction of a hazardous waste landfill cover.]